

REMARKS

Claims 1 – 3 and 5 – 12 remain pending in the present application.

REJECTION UNDER 35 U.S.C. § 103

Claims 1, 3 and 5-12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Flemings, et al. (U.S. Patent No. 6,250,365). Claim 2 is rejected under 35 USC § 103(a) as being unpatentable over the Flemings '365 patent, and further in view of Yamaguchi, et al. (U.S. Patent No. 6,460,596).

Attorney for the applicant and the Examiner spoke on October 3, 2005 to discuss the disclosure of the Flemings '365 patent. An agreement was reached as to the disclosure of the Flemings '365 patent. The following memorializes the discussion.

The Flemings '365 patent discloses a die casting mold 18. One half of the mold 18 is shown in Figure 2a of the Flemings '365 patent. (Col. 2, ll. 36 -37.) The half of the mold 18 shown in Figure 2a includes an upper section 30 and a lower section 32 separated by an insulating layer 28. The upper section 30, the lower section 32, and the insulating layer 28 are bolted together. (Col. 2, ll. 54 – 57.) The mold 18 also includes a throat 20 and channels 22 that allow introduction of molten material into a mold cavity 26 for casting.

In operation, a casting is made using the mold 18 and a matching mate (not shown). (Col. 2, ll. 40 – 42.) The mold 18 of Figure 2a and the matching mate separate along a plane that is parallel to the surface of the page of Figure 2a. Separating the mold 18 of Figure 2a and the matching mate along this plane allows removal of the U-shaped casting contained in the mold cavity 26.

The mold 18 of Figure 2a includes both heaters 34 and cooling mechanisms. (Col. 2, ll. 64-67). Thus, the matching mate of the mold 18 of Figure 2a includes both heaters 34 and cooling mechanisms. Accordingly, the Flemings '365 patent fails to teach or suggest a fixed mold section provided with only heating means and a movable mold section provided with only cooling means as included in independent claim 1.

Furthermore, the Flemings '365 patent teaches away from including only heating means in the mold 18 of Figure 2a and only cooling means in the matching mate or vice versa. This is because the part would not be cast correctly since half of the metal in the mold cavity 26 would be heated while the opposite half of the metal in the mold cavity 26 would be cooled. Accordingly, the Flemings '365 patent fails to teach or suggest a fixed mold section provided with only heating means and a movable mold section provided with only cooling means as included in independent claim 1. Therefore, it is respectfully submitted that claim 1 is allowable over the rejection based on 35 U.S.C. § 103. Claims 2, 3 and 5 – 10 are each ultimately dependent upon claim 1 and add perfecting limitations. Therefore, it is respectfully submitted that claims 2, 3 and 5 – 10 are each allowable over the rejection based on 35 U.S.C. § 103.

For the same reasons, the Flemings '365 patent fails to teach or suggest a mold with a stationary mold, a movable mold, temperature increasing means as the only temperature control device associated with the stationary mold, and a temperature decreasing means as the only temperature control device associated with the movable mold as included in independent claim 11. Therefore, it is respectfully submitted that claim 11 is allowable over the rejection based on 35 U.S.C. § 103. Claim 12 is

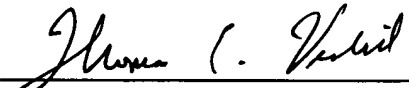
dependent upon claim 11 and adds perfecting limitations. Therefore, it is respectfully submitted that claim 12 is allowable over the rejection based on 35 U.S.C. § 103.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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By: 
Thomas E. Vesbit, 50,562

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600

MJS/tev/pmg